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Abstract

The prevalence of adolescents with emotional or behavioral disorders (EBD) is growing by the year, and schools and diagnostic clinicians are having difficulty agreeing on the definition of the terms and diagnoses that fit into the EBD category. As these discrepancies in definitions and requirements can trickle down and affect treatment, it is important to find lasting, effective treatment that can help reduce disruptive behaviors that are often present for children and adolescents with emotional and behavioral disorders. This study highlighted two music therapy interventions that are designed to focus on emotional identification, goal setting and the therapeutic relationship. The two interventions were compared and contrasted in their ability to improve classroom performance in an adolescent with an EBD diagnosis and keep the individual focused while maximizing on-task behavior throughout the day. The researcher used an ABAC single subject analysis design to find the behavior differences in a baseline (no treatment) and the two interventions: thematic clinical improvisation and lyric analysis. Case notes, data from observations, and interviews with teachers and the participant were analyzed to draw conclusions on the efficacy of each intervention. Results indicated a higher rate of on-task behavior and classroom performance with music therapy than during the baseline weeks. However, due to extraneous variables, it was difficult to find any support in drawing a conclusion about which therapeutic intervention was more effective, and whether or not the effect continued throughout the day. This study supports the need for further research regarding the benefits of music therapy interventions in a school setting with adolescents who have EBD related diagnoses.

Keywords: music therapy, emotional disorder, behavioral disorder, anxiety disorder, mood disorder, improvisation, lyric analysis, single subject

MONTCLAIR STATE UNIVERSITY

THE EFFECT OF THEMATIC IMPROVISATION AND LYRIC ANALYSIS ON
CLASSROOM PERFORMANCE IN AN ADOLESCENT WITH A
BEHAVIORAL/EMOTIONAL DISORDER

by

Brandon K. Madsen, MT-BC

A Master's Thesis Submitted to the Faculty of
Montclair State University

In Partial Fulfillment of the Requirements
For the Degree of
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College of the Arts

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Montclair State University

Montclair, NJ

2018

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CHAPTER 1

Introduction

Introduction to the Population

Children in the United States are at a greater risk now for developing a behavioral or emotional disorder than any time in the past. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) established that there is a link between disorders that are classified as behavioral or emotional and families with a history of drug abuse and mental illness (American Psychiatric Association, 2013). The combination of these biological factors and the often unstable homes that result are major contributors to the development of these disorders in children and adolescents. Many children live in unstable home environments with a lack of consistent adult guidance in their lives. According to a survey in 2014, about 11.4% of youth (age 12-17) had had a major depressive disorder in the past year, and 9.4% currently used illicit drugs, with 24% regularly smoking cigarettes (Center for Behavioral Health Statistics and Quality, 2014).

Emotional and behavioral disturbances are classified under the Individuals with Disabilities Education Improvement Act (IDEIA), but there is not an actual diagnosis of such presented in the DSM-V. Instead, there is the classification of Disruptive, Impulse-Control, and Conduct Disorders, which includes Conduct Disorder, Intermittent Explosive Disorder, and Oppositional Defiant Disorder (ODD). Bipolar and Related Disorders, Depressive Disorders, Trauma- and Stressor-Related Disorders, Obsessive-Compulsive Disorders, and Anxiety Disorders can also all be considered to fit the category of Emotional Disorders (American Psychiatric Association, 2013).

Children and adolescents who are diagnosed with an Emotional/Behavioral Disorder (EBD) have a wide range of diagnoses and symptoms. The broad category includes any children that “consistently exhibit behaviors that are personally or socially deviant, maladaptive or inappropriate.” (Peters, 2000). The IDEIA says that a child must exhibit one or more of the following characteristics: difficulty learning that cannot be explained by other factors, difficulty building and maintaining satisfactory interpersonal relationships, inappropriate behaviors or feelings under normal circumstances, a general pervasive mood, and a tendency to develop physical symptoms or fears associated with personal or school problems. These characteristics must be present for a long period of time, and must adversely affect their education (IDEIA, 2004). Adverse behaviors can include any of the following: poor impulse control, age inappropriate behavior, impulsive aggression (temper tantrums, striking out, verbal hostility, swearing, destructiveness), behavior that occurs for no reason (overreaction to situations), social acting out (gang involvement, illegal behavior, violence against person or property), poor frustration tolerance and inability to delay gratification, poor school performance, poor concentration, anxiety and fear, irritability, depression, hyper- or hypo-activity, deterioration in relationships with peers, parents and authority figures, pre-occupation, anhedonia (the inability to feel pleasure from typically pleasurable things), sadism, masochism, and unpleasant disposition (Crowe, 2007).

Behavioral Disorders. Behavioral Disorders are the most frequently diagnosed mental disorders in children and adolescents and are more often found in males than females. Behavioral disorders can include such disorders as Conduct Disorder, Oppositional Defiant Disorder, and Intermittent Explosive Disorder, and can often have

co-morbid diagnoses of Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), and Antisocial Personality Disorder. Conduct Disorder is defined by the DSM-V as “a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated.” This disorder can involve aggression, destruction of property, theft and deceitfulness, and can adversely affect academics and social skills. Oppositional Defiant Disorder is defined as having less serious symptoms than Conduct Disorder. ODD involves “a pattern of angry/irritable mood, argumentative/defiant behavior, or vindictiveness lasting at least 6 months...”, while Intermittent Explosive Disorder is “recurrent behavioral outbursts representing a failure to control aggressive impulses as manifested by either of the following: Verbal aggression... [or]... Three behavioral outbursts involving damage or destruction of property and/or physical assault involving physical injury...” The DSM-V reported an estimated prevalence of up to 10% for CD and up to 16% for ODD in children and adolescents. This only includes diagnosed cases, and a behavioral or emotional disorder may not be diagnosed unless certain criteria have been met (American Psychiatric Association, 2013).

Emotional Disorders. Emotional disorders can include many diagnoses that are found in the DSM, including mood disorders and anxiety disorders (Crowe, 2007; IDEIA, 2004). Mood disorders can fit into several diagnoses, including the following: Bipolar and Related Disorders, Depressive Disorders, and Trauma- and Stressor-Related Disorders. These also can have several co-morbid diagnoses such as Obsessive-Compulsive Disorders or Borderline Personality Disorder (American Psychiatric

Association, 2013). All of these disorders can be defined in part by periods of depressive mood for a long period of time.

Anxiety disorders are also categorized as emotional disorders according to IDEIA. Anxiety disorders can develop as a result of environmental stress as well as some contributing biological factors. They affect 2 to 5 percent of children in the United States (Alloy, Riskind, & Manos, 2005). Anxiety disorders are not diagnosed as often as behavioral disorders or mood disorders, but this is perhaps because anxiety disorders don't receive as much attention due to their internalizing nature. They tend to only affect the individual, whereas behavioral disorders are externalizing, or affect other people.

Emotional and Behavioral Disorders in Schools

The Individuals with Disabilities in Education Improvement Act (2004) defines an area of "emotional disturbance" which includes many of the emotional and behavioral disorders mentioned above, but also includes ADHD, schizophrenia, and personality disorders. Because of this broad interpretation, the definition of "serious emotional disturbance" in the document has been criticized as vague and inadequate. There are numerous shortcomings to the definition, as it does not concretely comply with the DSM-V, making it difficult to acknowledge specific diagnoses. In addition, students must be failing academically to qualify for special education services according to IDEIA. (Kauffman, 2001). This creates a void in services for children that may have clinical diagnoses but are not failing academically.

Students with EBD are often more difficult to teach within a typical classroom due to problems with inattentiveness, deliberate disobedience of authority, learning challenges, and difficulty forming bonds with peers and teachers. Because of these

difficulties, it is important for students with these disorders to be identified and receive additional services that can accommodate their needs. If these students meet the qualifications for IDEIA, they receive an IEP (Individual Education Plan), which outlines goals and objectives to be met in an academic period by a treatment team. A treatment team can include special education teachers, parents or guardians, some officials from the school and the student's classroom teachers.

Students who do qualify for special education services under IDEIA have such a widely varying range of symptoms that it is difficult to meet their needs using some of the more basic services available. IDEIA makes it possible for educators to construct interventions and create goals for students identified as meeting the requirements for emotional and behavioral disorders, but the diversity of issues makes identifying an effective treatment difficult. Many challenges still exist in identifying and treating children and adolescents with emotional and behavioral disorders.

Current Treatments Provided

The current treatments for EBD's in a school environment vary widely, as is to be expected with the wide range of diagnoses and symptoms. Despite this variation, there are a few widely accepted treatments that do exist. The most common of these is Cognitive Behavioral Therapy (CBT), an evidence-based approach which helps patients to analyze existing patterns of thinking and to try modifications to identify more positive and acceptable patterns of thinking (Sheldon, 2011). Key aspects to this therapy are goal setting, critical thinking and a strong therapeutic relationship (National Association of Cognitive-Behavioral Therapists, 2016). An offshoot of this therapy is called Family CBT, which incorporates the family into the decision making process. This can be helpful

for children who have anxiety or depression related to school which may not be noticed at home by the rest of the family (Sheldon, 2011).

Another treatment involves exploring experiential avoidance through psychodynamic approaches. Experiential avoidance is the notion that an individual will attempt to avoid certain emotions, thoughts, memories, sensations, events or locations often at the detriment of themselves or others. Exploring these through psychodynamic means can bring out meaning behind certain psychological deviances (Barlow, Allen, & Choate, 2004; Hayes, et al., 1996). However, it is also important to avoid triggering memories, sensations or events that will re-traumatize the child or adolescent, at least until they are capable of dealing emotionally with the events that created the trauma in the first place.

There are many other family group therapy interventions that have seen success in the treatment of emotional and behavioral disorders. Family Group Therapy and Family-Based Therapy are two kinds of family therapy that can be used for children with any emotional or behavioral disturbances where the family can be involved. Studies have shown that parent involvement and training can help children manage negative behaviors (Wells, Silverman, & Bailey, 2003).

There are also pharmacological treatments for many of the disorders included in the emotional/behavioral category. Many antipsychotics, antidepressants, anticonvulsants, anxiolytics and benzodiazepines are used in the treatment of mood disorders, behavioral disorders and anxiety disorders (Baldwin et al., 2005).

Music Therapy as a Treatment Alternative

Though the treatments listed above have been widely accepted as treatment for children and adolescents with emotional and behavioral disturbances, they lack some important key elements that students with these issues need to be successful. For example, students with EBD are highly distractible and experience a high number of negative behaviors when not properly focused (Thaut, 2005). This demonstrates the need for highly engaging, hands-on experiences to effectively treat students with these disorders.

Most children and adolescents can identify with current popular music, whether their music of choice is rock, hip-hop, alternative or rap. All genres have a particular social precept and it is often considered “cool” to listen to them in certain groups. Also, many songs have lyrics or ideas that children and adolescents can readily relate to. Adolescents use music to relax, relieve stress and boredom, deal with their problems, deal with other people, and increase musical skills (Crowe, 2007). Since adolescents are already predisposed to popular music, it can be a very motivational tool for engaging students with EBD. Music can be a beneficial instrument in non-verbally focusing on positive feelings and concepts related to academic work, relationships with others, image of self, and accomplishing goals (Bruscia, 1998).

According to the American Music Therapy Association (AMTA), music therapy is defined as “the prescribed use of music by a qualified person to effect positive changes in the psychological, physical, cognitive, or social functioning of individuals with health or educational problems” (2003). Music therapy is using a tool that adolescents already use every day in order to help students with EBD achieve goals in a way that is more

engaging and motivating for them. Music therapy can even help formulate goals in a unique way that is more easily understood and more accepted by students with EBD.

Specific music therapy practices vary greatly, and many of them have not been tested fully with students with EBD in a school setting. The difficulties with funding and the strict requirements to receive special education services make music therapy in a school setting more difficult to maintain for an extended amount of time. Some specific music therapy practices that are used for adolescents in general are musical skill building, music appreciation, music performance groups, name that tune, movement to music, songwriting and composition, music for relaxation, and music imagery (Crowe, 2007.) Orff-based techniques have also been explored in school settings, and are very popular in many schools in the Midwest (Colwell, 2005; Shain, 2011). Lyric analysis can also be used with individuals of all ages with psychiatric diagnoses to help explore emotions and promote goal setting, positive reactions to circumstances, and relating to others (Cassity & Cassity, 2006).

The goals of music therapy and all of the other treatments mentioned above are similar despite the differences in methods. The end result that all treatment teams strive toward is the same: helping the student to function in school and social settings with their peers. Yet some music therapy techniques have not been researched enough with students with EBD, and some have not been researched at all. With all of the difficulties that educators and clinical professionals face with students with EBD, it is important to be knowledgeable in specific treatments that are effective and efficient.

Purpose Statement

The purpose of this study was to examine and evaluate the effects of thematic clinical improvisation and lyric analysis as music therapy interventions on a subject with Emotional and Behavioral disturbances and determine the relationship, if any, between each intervention and classroom performance outside of the music therapy session.

Specifically, this study was conducted to answer the following research questions:

1) Does participation in music therapy increase on-task behaviors and classroom performance outside of music therapy?, 2) Which intervention, thematic clinical improvisation or lyric analysis, increases classroom performance and on-task behaviors more and outside of music therapy? and finally 3) Does the effect of each music therapy intervention continue throughout the day, effectively increasing classroom performance and on-task behaviors?

CHAPTER 2

Review of Literature

Mental Health Disorders in Adolescents

There is an abundance of research available on the prevalence of mental disorders in children and adolescents in the United States. Mental health problems are especially prominent in adolescents. The brain is still developing during adolescence, and yet they have developed beyond their childhood and are exploring the world in more adult terms. Adolescents are particularly susceptible to emotional and mental turmoil because they are in a tumultuous period of their lives between childhood and adulthood.

According to Kessler et al. (2005), approximately one out of every five adolescents has or has had a diagnosable mental health disorder. Kessler and associates surveyed nine thousand two hundred and eighty-two people in the United States through door-to-door interviews, using the results to compile prevalence statistics for major DSM-IV diagnoses at the time. A more recent study by Merikangas et al. (2010) found that 21.4% of adolescents ages 13-18 have what is labeled as a “severe mental disorder” while a staggering 46.3% have some evidence of any kind of mental disorder through their adolescence. Out of all these cases of adolescents with diagnosable mental illnesses, approximately 75% of them are receiving some form of treatment, while the rest are left untreated (Wang, Berglund, & Kessler, 2001).

Emotional and Behavioral Disorders

Among the many mental health issues that can begin or grow during adolescence, a large number of them are emotional or behavioral disorders. Emotional Disorders can include Depressive Disorders, Trauma- and Stressor-Related Disorders, Bipolar and

Related Disorders, and Anxiety Disorders, which are all defined in the DSM-V. Rushton, Forcier, and Schectman (2002) analyzed data collected by the National Longitudinal Study of Adolescent Health and found that 20-30% of adolescents have at least one major depressive episode before adulthood. Researchers also found that about 25% mood disorders and 50-75% of anxiety disorders first emerge during adolescence (Kessler et al., 2005). Kessler, Avenevoli, and Merikangas (2001) used self-report measures to survey middle school children, and found that there was a 20-50% rate of significant depression in children 11-18 years of age. Further studies showed that 14% of adolescents have a diagnosis for a specific mood disorder and 25% are diagnosed with an anxiety disorder (Merikangas et al., 2010).

Behavioral disorders, labeled Disruptive, Impulse-Control, and Conduct Disorders in the DSM-V, include Oppositional Defiant Disorder (ODD), Intermittent Explosive Disorder (IED), and Conduct Disorder (CD) as the major diagnoses. The prevalence of ODD in adolescents is approximately 16%, and the prevalence of CD in adolescents is approximately 10%. These disorders are found more significantly in male adolescents (American Psychiatric Association, 2013). These three disorders operate on an almost hierarchical level, with ODD being a milder disorder, IED being diagnosed once any form of violence, destruction of property, or unlawful behavior comes into play, and CD being the “repetitive and persistent pattern of behavior” at the top of the hierarchical ladder. Conduct Disorder can evolve into Antisocial Personality Disorder if left unchecked and untreated (Alloy, Riskind, & Manos, 2005).

Internalizing Behaviors vs. Externalizing Behaviors

Emotional and Behavioral disorders, though generally different in diagnosis, can also have overlap in symptoms. Even with these overlaps, adolescents diagnosed with an emotional disorder tend to exhibit more internalizing behaviors and adolescents diagnosed with a behavioral disorder will tend to exhibit more externalizing behaviors (Crowe, 2007).

An internalizing behavior is one that only affects the person who is demonstrating the behavior (e.g. sadness, suicidal thoughts, and anxiety or fear). These behaviors are sometimes not noticed by parents and caretakers, or if they are noticed not seen as immediate of a threat as externalizing behaviors (Crowe, 2007). Internalizing behaviors are more often associated with emotional disorders, as they involve the inward emotions of the individual who exhibits the behavior (Gresham & Kern, 2004).

Externalizing behaviors are often displayed toward other people or things, such as violence, aggression, bullying, disobedience, and vandalism (Furlong, Morrison, & Jimerson, 2004). These behaviors are more often associated with behavioral disorders, particularly conduct disorder, though adolescents with emotional disorders can also demonstrate externalizing behaviors. These behaviors receive more attention than internalizing behaviors as they affect more people, and often are displayed at schools where they can put multiple people in danger. Because of this, treatment is more often sought for behavioral disorders (Crowe, 2007; Furlong, Morrison, & Jimerson, 2004).

Several studies have shown the link between externalizing behaviors and emotional and behavioral disorders exhibited in school. A study by Raaijmakers et al. (2008) found that children with aggressive behavior displayed deficits in impulse control

as well. Eighty-two children in the study were subjected to a series of tests that assessed inhibition. Results showed that children with aggressive behavior scored much lower on inhibition tasks than children in the control group (Raaijmakers et al., 2008). Another study suggested that aggressive behavior was linked to emotional competence. This study set forth to prove that the ability for a child or adolescent to identify and understand one's own emotions was a key component to controlling externalizing behaviors. The study also showed that children who did not self-regulate their emotions had a higher frequency of internalizing behaviors. This showed a link between externalizing and internalizing behaviors. Internalizing behaviors can accompany externalizing behaviors, but the externalizing behaviors may be more evident (Bohnert, Crnic, & Lim, 2003).

A study conducted by McKnight, Huebner, and Suldo (2002) found quantifiable evidence that externalizing and internalizing behaviors were related to life satisfaction. In other words, if life events were generally enjoyable, then externalizing and internalizing behaviors decreased, whereas if life events were stressful or aggravating, then externalizing and internalizing behaviors increased (McKnight, Huebner, & Suldo, 2002). This helped identify acceptable and effective treatments for these behaviors and their accompanying diagnoses.

Treatment for Adolescents

Though many treatments exist for adolescents with emotional and behavioral disorders, Cognitive Behavioral Therapy is the most common treatment that is agreed upon as effective (Sheldon, 2011). Compton et al. (2004) conducted an analysis of the current evidence for CBT and found that it was especially useful for children and adolescents with anxiety and mood disorders, or emotional disorders. Another analysis

came to similar conclusions when reviewing cases of CBT with children diagnosed with anxiety disorders. Results showed a 56% remission rate in those children who underwent CBT compared to those who received no treatment (Cartwright-Hatton et al., 2004). A 2002 study investigated the effect of anger management and cognitive-behavioral interventions on middle school children and found that even a month after treatment, subjects were less aggressive and showed decreased inappropriate behaviors (Robinson, Smith, & Miller, 2002).

Cognitive-behavioral therapy is also effective in a family setting as shown by a 2004 study that found a reduction of both externalizing and internalizing behaviors in children with bipolar disorder using family-based CBT (Pavuluri, 2004). Involving the family has found to be one of the most effective tools with whichever method of therapy is used. Eyberg, Nelson & Boggs (2008) investigated evidence-based treatments for children and adolescents with disruptive behavior disorders and found that the most effective treatments were those that involved parent or guardian training along with child therapy. They also noted that the best treatment methods involved acknowledgement of “a greater number of adjunctive treatments beyond psychosocial interventions,” going on to say that more adjunctive treatments seem to lead to more successful outcomes (Eyberg, Nelson, & Boggs, 2008).

Psychotherapy is also used in both a family setting and a one-on-one setting. A study in 1999 demonstrated that family psychotherapy decreased problem behaviors when compared to traditional academic tutoring (Weiss, Catron, Harris, & Phung, 1999). Due to the nature of psychotherapy, these studies were conducted over the course of several years and could take a while to see changes in behavior.

Another method involving both the child and the parent is called parent training. A 2006 study proposed that parent training in tandem with family-focused support and social skills training could help prevent Conduct Disorder in high-risk populations (Bierman, 2006). In 2003, a study investigated parent-child interaction therapy with preschool children. The study found that therapy resulted in a significant reduction in unwanted behaviors (Nixon, Sweeney, Erickson, & Touyz, 2003). Also in 2003, McCellan and Werry provided an inventory of evidence-based treatments for children with psychiatric disorders and concluded that family-based therapy and parent training were among the most effective treatments according to their research. They also cautioned against using any treatment with emotional and behavioral disorders that has not been shown to be effective through research (McCellan & Werry, 2003).

McCellan and Werry also supported the use of pharmaceutical treatments for children with emotional and behavioral disorders, saying that using these in conjunction with psychotherapeutic and family-based treatments produced the best results (McCellan & Werry, 2003). Baldwin et al. (2005) wrote evidence-based guidelines for treating anxiety disorders and recommended various antidepressants and anti-anxiety medications.

In addition to all of these accepted treatment practices, new treatments are being researched and proposed every year. In 2004, Barlow, Allen, and Choate proposed a treatment for emotional disorders which involved preventing emotional avoidance, provoking emotional expression through situational, internal and somatic cues, mood-inducing exercises, and facilitating action tendencies not associated with the emotion. Their proposal included elements of previous treatment programs but focused on evoking

emotion and exploring these emotions through elements that were familiar and enjoyable to the subject (Barlow, Allen & Choate, 2004).

Music Therapy and Adolescent Mental Health

Music therapy, or the use of musical elements to produce non-musical results, can go far in exploring emotions, reactions, goal setting, impulsivity, and other elements that other therapies do, but in a different way than more traditional therapies. Music therapy may create a more enjoyable atmosphere while focusing on clients' goals in a way that can access thoughts and emotions and alter behaviors in a way that is felt and experienced differently than more traditional forms of verbal therapy. For adolescents involved in music therapy, they are completing the therapeutic process using a medium that they may already enjoy and about which they may already be knowledgeable.

Rickson and Watkins (2003) found that music therapy that focuses on goals of autonomy and creativity with adolescents can help promote pro-social behavior, with results lasting beyond the initial therapy time period. Though the study did not find statistical significance, the results suggested that music therapy was useful in helping adolescents interact more appropriately with each other. The music therapy interventions used varied according to a humanistic model, with the researchers allowing the structure to fall away throughout the study, creating opportunities for the participants to structure their own sessions. Interventions included music choices, songwriting in blues style and singing greeting songs. The researchers called for a more organized study to help find more significant results.

Issues in proper social behavior are the most prominent symptoms of an emotional or behavioral disorder. Several studies have been conducted on music therapy

and its efficacy on correcting these behaviors. In 1983, Henderson found that music therapy had several positive effects in hospitalized adolescents, including better mood recognition, increased group cohesion, higher self-esteem, and a better understanding of one's own emotions. Anshel and Kipper (1988) also investigated the effects of singing on trust and cooperation, finding that singing together in a group increased group cohesion and pro-social behaviors among participants (Anshel & Kipper, 1988).

In 1989, Eidson found that using a behavioral music therapy program with children who were 11-16 years of age with emotional and behavioral disorders improved social skills and interpersonal behaviors. The middle school students were placed in a music therapy group or a control group, and classroom behavior was then evaluated. Scores for the children in the music therapy were almost twice the scores of the children in the control group (Eidson, 1989).

More recently, Robb (2000) conducted a study to evaluate the contextual support model of music therapy. This study found that music encouraged social engagement in isolated children (Robb, 2000). Another study in 2003 found that there was a close relationship between the expression and communication of emotions. The results showed a significant relationship between the expression of emotion in music and the understanding of emotion and communication of emotion vocally (Juslin & Laukka, 2003).

Creating music therapy sessions according to the preferences of the adolescents seems to be important for the success of therapy. Most studies seem to emphasize the need for eclectic approaches and sessions geared towards the individual's preferences and tastes. Gold, Voracek, and Wigram (2004) said as much in their meta-analysis on the

effectiveness of music therapy for children and adolescents with psychopathology. In their study, they found that music therapy had a highly significant effect on clinically relevant outcomes in this population, including interpersonal skills, focus and attention, overt behaviors, identifying emotions and controlling aggression. The researchers particularly noted the effect on developmental and behavioral disorders, but no specific behaviors were mentioned. According to the authors, music therapy set them up to succeed because it brought them into an atmosphere where they enjoyed working on the therapeutic goals presented (Gold, Voracek, & Wigram, 2004).

Sausser and Waller (2006) also studied the effects of individualized music therapy plans. They developed a music therapy model for adolescents with EBD stressing individual preferences and modeling sessions based on personality and mood. The model suggests using music as a motivator and reinforcer, varying interventions and using preferred music (Sausser & Waller, 2006).

Gladfelter (2002) described music therapy in a private school setting for students with learning disabilities. Interventions in these sessions included playing instruments, singing, listening to music, creating music, improvising, and songwriting. These interventions were showed to help music therapists improve goals of building self-esteem, improving attention to task, enhancing communication skills, encouraging self-expression, and developing social skills (Gladfelter, 2002).

Music therapy has also been shown to create a more positive view of self with children with emotional and behavioral disorders. Kivland (1986) found that individual music therapy sessions with a boy diagnosed with CD created an increase of positive self-statements.

Several studies have been conducted on the effect of music therapy on classroom performance and on-task behavior. One such study investigated the effect of background music on the task performance of four children with psychiatric disorders. Results indicated that the back ground music positively affected the performance of the children, with a 60% improvement seen in all subjects (Burleson, Center, & Reeves, 1989). In 1999, Montello and Coons went one step further and evaluated the effects of active based music therapy and a passive listening activity. Both music therapy interventions showed positive significant improvement in the areas of on-task behaviors, aggression and motivation (Montello & Coons, 1999).

Clinical Improvisation

Clinical improvisation in music therapy is a widely accepted intervention in both psychiatric populations and with children and adolescents (Nordoff & Robbins, 1980). Improvisations can target the goals of emotional expression and discovery, problem solving and goal setting, and even listening and respecting the thoughts of others (Gardstrom, 2007; Nordoff & Robbins, 1980). Clinical improvisation, often referred to as simply *improvisation*, is a therapeutic process in which clients work together with a music therapist to create music extemporaneously within certain confines for the purpose of accomplishing therapeutic goals (Gardstrom, 2007). Improvisation is often used to explore an individual's thoughts and feelings and encourage introspection as well as interaction with others.

Tervo (2001) described the use of improvisation in music therapy as similar to free association in psychotherapy (Tervo, 2001). He particularly noted the efficacy of improvisation even when the participants had no particular musical skill. Tervo described

improvisation to be a personal and liberating instrument for working together and solving situational problems with others in a way that is enjoyable and instructional. It can be as safe or as demanding as the therapist or the client allows it to be (Tervo, 2001).

There are a few resources that investigate the use of clinical improvisation with adolescents. Some studies show the use of improvisation for facilitating emotional discovery. McFerran-Skewes (2000) used improvisation in a psychodynamic model music therapy group with adolescents. She found that improvisation was useful in exploring emotional expression and facilitate the relief of emotional pain and grief (McFerran-Skewes, 2000). Lehtonen and Shaughnessy (1997) wrote that music therapy can reach adolescents with emotional and behavioral disorders, providing treatment and a means of channeling aggression and destructive behavior (Lehtonen & Shaughnessy, 1997).

Other studies have shown the effect of improvisation on positive interactions, agreeability and group cohesion. McIntyre (2007) created a project that used different music therapy interventions, including improvisation, with adolescent boys diagnosed with EBD. Students involved in the project showed significant improvement in social interaction, self regulation, attitude, and self awareness. Gardstrom (2003) also wrote about using improvisation with troubled adolescents. In a qualitative study investigating the meaning of different improvisations with adolescents, Gardstrom found that the participants were inclined towards rhythmic improvisations which brought out enjoyment and positive attitudes in the participants. She also noted that improvisation elicited agreeability and positive communication experiences among participants (Gardstrom, 2003).

Lyric Analysis

Less research has been done on lyric analysis with adolescents, though some researchers have looked at the effects of lyrics on adolescents and their interpretation of the meaning of lyrics. Some of these studies look at possible negative effects of violent music on potentially violent adolescents. Desmond (1987) looked at the research connecting violent offenders to violent music and concluded that there was no evidence of a link and that, in truth, music seemed to create more emotional understanding and better camaraderie in adolescents (Desmond, 1987).

A study in 2007 showed the effect of lyric analysis and musical exploration on adults with substance abuse disorders. Results indicated that the music therapy that involved lyric analysis among other interventions resulted in increased self-esteem, experiencing positive emotions, and the ability to express themselves (Baker, Gleadhill, & Dingle, 2007).

A few studies have been done on the use of rock music with adolescents. Rock music has been found to be of high interest to troubled adolescents because of the emotional content of the lyrics and music (Roberts, 2001). It can affect both children and adolescents on an emotional level with more impact than just words or even many other genres of music, opening them up to emotions such as love, longing, anger, sadness, shame and sexuality (Tervo, 2001). Tervo wrote that music is both safe and exciting for adolescents, that it is like a “caress without a touch” (Tervo, 2001).

A study by Mark (1988) explored the use of rock music and lyric analysis to get hard-to-reach adolescents to open up. The researcher studied trust, emotional identification, coping skills and communication through lyric analysis. Results indicated

that rock music from several different decades could be used to help adolescents identify and communicate what is important to them with their peers and adults (Mark, 1988). More recently, Laiho (2004) found that popular rock music created social bonds, decreased loneliness, and increased coping skills among adolescents (Laiho, 2004).

Summary

Though the research supporting music therapy with adolescents is extensive, the research specifically involving improvisation and particularly lyric analysis is still difficult to find. Support for the use of lyric analysis and improvisation for use with adolescents with EBD is sparse, but the literature that does exist suggests that rock music might be a good place to start when using lyric analysis and that improvisation can be very helpful in promoting socialization skills and on-task behaviors. In this study, the term *thematic clinical improvisation* is referred to in order to specify that the clinical improvisation used is directed at a specific theme or goal.

The present study will address three research questions. First, does participation in music therapy increase on-task behaviors and classroom performance outside of music therapy? Though research indicates that it does, there is need for more research in the specific areas of thematic clinical improvisation and lyric analysis. Second, does participation in thematic clinical improvisation or lyrical analysis result in better classroom performance and on-task behaviors outside of music therapy? In other words, which of these interventions works best at achieving pro-social and pro-academic goals? Finally, does the effect of each music therapy intervention continue throughout the day, effectively improving classroom performance and on-task behaviors? Though some research focuses on immediate effects, and a few studies have shown long term results,

the question still remains whether participation in thematic clinical improvisation or lyric analysis can affect behavior in a positive way throughout the day. This study intends to shed some light on these questions.

CHAPTER 3

Method

Participants

After receiving permission to work with a student at the Therapeutic Elementary School in a California school district, the researcher worked with school staff to select candidates for the study. As a single-subject applied behavioral analysis, one participant was selected from the student population. The participant was an adolescent who met the requirements of (1) having been determined to have emotional/behavioral disturbances which affected his classroom and school performance, (2) being between the ages of 12 and 18, (3) exhibiting off-task behaviors in class that disrupted the learning of the participant and those around him/her, and (4) not currently receiving any music therapy.

Due to staff familiarity with students and their caregivers, the school staff was able to determine which students would be willing or able to participate and which would not be able to consent to the study due to instability, mental illness, or language barriers. After considering a number of potential study participants, student D was suggested as the prime candidate for the study. Consent was given by D's legal guardian, and D expressed interest in participating in the music therapy study. After acceptance of all terms on the informed consent statement and the answering of any relevant questions related to the research and its risks and benefits, the participant met with the researcher and began participation in March of 2017. The researcher met with D and the school psychologist, and a week later, observations in the classroom began in order to set a control for the study.

D was a 14 year old boy in 7th grade at the school. Before starting this study, he was having a lot of trouble focusing in class. In addition to suffering emotional and behavioral disturbances, D also had a diagnosis on the autism spectrum, though high functioning, and several co-morbid health issues. He did not complete class work, paid little attention to teachers, slept in class, and became argumentative and sometimes aggressive with any attempt at redirection. He was living in a group home, and both the school psychologist and school principal reported several fights with other children at his group home. D had not previously attended any other music therapy treatments or programs. He did report that he took drum lessons and wished to purchase his own set of drums in the future. D reported that going to drum lessons improved his mood.

According to the school principal, the day of meeting with the researcher for the first time, D had lashed out at the school bus driver in the morning and had trouble calming down on the way to school. The three main issues that D's teachers gave as things for D to improve on were: staying awake in class, completing class work, and staying on task. D also showed evidence of depression and difficulty adjusting to a constantly changing home life

Setting

The research was conducted at a small specialized school that services Kindergarten through 8th grade in a California school district. The school only has about 50-60 students enrolled and specifically advertises as catering to students with emotional and behavioral disturbances. They have therapeutic activities and individual counseling, among many other therapeutic interventions to target children and adolescents who exhibit signs of emotional or behavioral disturbances. However, music therapy is not yet

an intervention that they offer. The school staff showed interest in this study because they wanted to help in research that could aid in adding music therapy as a future therapeutic option.

During observations, both for the baseline week and for observations following the interventions, the researcher visited the participant in the classroom designated for class studies during that allotted time period. Weekly sessions were conducted during the allotted intervention time from 8:15 AM to 8:45 AM on Fridays, which was agreed upon before the beginning of the study. Since school started at 8AM with breakfast, this gave the participant time to settle and eat breakfast before coming to music therapy. Sessions were conducted in a designated room in the participant's school in which school activities were generally held. The music teacher also used this room to store musical instruments which were loaned to the researcher for the purpose of this study. The participant was seated across from the researcher with the musical instruments easily accessible in between them, but out of immediate reach while the participant was seated. Doors were closed to the room and a sign was posted on the door informing people not to enter while the session was ongoing. The researcher was given a visitor's badge and a walkie-talkie in order to contact the front office in case of emergencies.

Consent

Before initiating the study, the researcher obtained a formal document of permission from the school board in order to conduct the study with a student in the school district. Because the participant did not have power to legally make informed decisions, the informed consent statement was read by all legal guardians of the participant, as well as the participant involved in the study. The participant and legal

guardians were asked separately for their permission and given ample time to decide whether to participate in the study in order for there to be no undue pressure to comply. All parties involved were presented with all options involving the interventions being used, including all risk and benefit factors and the participant's rights to respect and privacy. After reading over the informed consent statement, all parties had an opportunity to ask any questions in order to fully understand the implications of the study and the participant's involvement. Participation was voluntary and the participant and legal guardians were informed that participation would not impact their relationship with the school or the school district. The consent form contained a brief overview of the treatment process and guaranteed the confidentiality of all personal information obtained over the course of the study (See Appendices A and B). The researcher also worked with the school principal and school psychologist to plan the appropriate space and time for the research study to take place.

Materials

Materials used in this study included an Off-Task Behavior Chart and Classroom Performance and Behavior Chart modified from an observation packet, group on-task form, and weekly behavior form used by the school, as described above (see Appendix C). The researcher used a new chart for each of 16 observation periods. The Off-Task Behavior Chart designated times for each minute of the hour to mark down whether or not the participant was on task during that minute. It also included designating marks for different types of off-task behavior, such as verbal noise, physical behaviors, talking back, aggressive behaviors, failure to follow directions, and passive off-task behaviors such as staring out the window or not paying attention. The Classroom Performance and

Behavior Chart rated compliance with verbal instructions, adherence to rules, social interactions, and on task behaviors, compiling these 4 categories into scores of 0-3, which was added together into a 12 point scale of classroom performance.

The researcher used a Takamine G-Series six-string acoustic guitar as the primary musical instrument in this study during the song-writing and improvisation interventions. The school provided a music room which included a second acoustic guitar, an electric guitar, a small 25-key keyboard, a djembe, set of congas, three hand drums, two maracas, and a drum set complete with a snare, kick drum, hi-hat cymbal, and a stand with two tone blocks and a cowbell. For each activity, the participant was provided with pen and paper to write down any comments or thoughts during the session. The researcher also had a notepad and pen to write down observations.

Song lyrics were printed out to the following songs to use in lyric analysis: “Three Little Birds”, by Bob Marley (1977), “The Sound of Silence”, by Simon & Garfunkel (1964), and “My Cherie Amour”, by Stevie Wonder (1969). These songs were chosen because of the participant’s love of his mother’s music when he was younger. He also stated he did not like loud music or current popular music. With each song presented, the researcher provided lyric sheets, a highlighter, a pen, and extra paper to write down thoughts and reactions.

A Toshiba Satellite L655 laptop computer was used to digitally transcribe all session notes and store data collected. The information collected was reviewed for data analysis and protected by a password to ensure privacy and confidentiality for the participant.

Design

This study was a mixed methods study, using observations made based on the participant's behaviors and history of behavior, both in class, and during the therapy sessions. An ABAC single subject applied behavioral analysis was used, with a baseline recorded before each intervention. The investigator, a board certified music therapist with five years of clinical experience, conducted an eight week study consisting of the two baseline observations, each followed by three weekly sessions (three weeks) of one of the pre-determined interventions.

An initial assessment interview was conducted in order to determine the participant's music preferences and to set up a schedule. The researcher and participant talked about several songs that could be used during the lyric analysis portion of the study, and over the course of the study three songs were agreed upon to use: one for each session.

The following week (Week 1 of the study), the researcher then spent two hours observing behavior in the classroom. Behaviors were observed for an hour at the beginning of school, from 9:00 AM to 10:00 AM, and again later in the day, from 11:00 AM to 12:00 PM. Observations took place at the same times each subsequent week. Using a behavior chart that was adapted from the school's existing format (See Appendix C), off-task behavior was recorded each minute for both hours of observation. The observer also rated D's compliance, adherence, social behavior, and on-task behavior for each quarter hour on a 3 point scale, and averaged the points for each observation. Compliance was defined as how well D listened to and followed directions. Adherence was defined as how well D knew what was expected of him and followed the rules and

guidelines in place for the classroom. Social behavior was defined as how D interacted with his peers and teachers and whether interactions were at the appropriate times and with appropriate content. On-task behavior was defined as when D was focusing on the current assignment without having to be redirected.

. The observation process was completed every week of the study on Fridays, which was the day agreed upon by the researcher, the school and the participant to be the day the study took place each week.

After the initial observation period (A_1), the first intervention (B) was started on Week 2. The first intervention consisted of thematic clinical improvisation directed towards themes such as exploring and detecting emotions, learning self-awareness and self-control, and following directions given by authority figures. This intervention took place for half an hour from 8:15 AM to 8:45 AM on Friday of every week, which had been previously agreed upon by the researcher, the school and the participant. Each session was followed by an hour of observation in the classroom from 9:00 AM to 10:00 AM, and another hour of observation from 11:00 AM to 12:00 PM, in order to replicate the times and locations of the initial baseline observation.

After three weeks of thematic clinical improvisation, comprising of weeks 2 through 4, another two hours of observation took place during Week 5 (A_2). Again, the week of observation included two one-hour periods of observation, from 9:00 AM to 10:00 AM and from 11:00 AM to 12:00 PM on Friday.

Following this second observation period, the second intervention (C) occurred once a week from 8:15 AM to 8:45 AM on Friday each week during Week 6 through Week 8 (three sessions). The second intervention consisted of lyric analysis, which used

songs from bands and genres that the participant helped to choose during the initial assessment interview. The songs were played and sung by the researcher and participant, and then analyzed using word replacement, highlighting and underlining important phrases, and relating the lyrics to areas of the participant's life. Each session was followed by two observation periods on the same day from 9:00 AM to 10:00 AM and 11:00 AM to 12:00 PM.

In addition to observations collected during the sessions and observations, the researcher talked with teachers and staff at the school, as well as the participant himself, about any changes or observations they had during the study. These observations helped to inform the quantitative and qualitative data found during the observation periods. Due to Spring Break, sicknesses and other absences, the entire study took place over the course of 12 calendar weeks.

Procedure and Data Collection

Initial Assessment Interview. Before the start of the study, the researcher conducted an initial assessment interview to assess the participant's attitude towards music, musical experience, music preferences, instrument preferences, and evaluation of his own performance in school. The interview was short and informal and the primary goal was for the researcher to discover music preferences to help with the direction of the interventions.

Baseline 1. During the initial week of observation, the researcher arrived at the participant's classroom at 9:00 AM and sat in an inconspicuous place in the back of the classroom where he could easily and accurately observe the participant. The researcher then used partial interval recording during the hour of observation, looking at a watch in

order to accurately time the one-minute recording intervals. At each one-minute interval, the researcher recorded what positive and negative behaviors were seen according to the Off-Task Behavior Chart. The researcher used a + to indicate on-task behavior and – to indicate off-task behavior, designating marks for vocal behavior (V), physical or motor behavior (M), and other passive off-task behavior (P). The researcher also marked any aggression (A), talking back (T) or not following directions (D). The researcher also rated the participant's Compliance with directions, Adherence to rules, Social Behavior, and On-Task Behavior, on a scale from 0-3, every 15 minutes. This was recorded on the Classroom Performance and Behavior Chart. This observation period was done twice in the first week on the same day, for two hours total, and the data was compiled for the first baseline (A₁).

Intervention 1. During Weeks 2 through 4 of this study, the participant attended thematic clinical improvisation sessions weekly at 8:15 AM on Fridays. Sessions began with the participant entering the room and sitting in a chair opposite the researcher. The researcher then welcomed the participant and thanked him for coming to the session.

The first intervention consisted of three improvisation sessions, each session designed to focus on elements of behavior and emotion as it related to positive decision making when completing tasks. The improvisations related to identifying one's own emotions, following directions, decision making, controlling impulses, identifying the emotions and preferences of others, and short term goal-setting. The participant was able to choose an instrument to use during the improvisation, and was able to change instruments only at set times during the session as it related to the intervention. The researcher used the guitar to accompany interventions, and provide ample time for

discussion after each intervention. The researcher provided verbal instructions at the beginning of each session, as well as verbal and non-verbal redirection during the session as needed. In the event of negative behaviors during the session, unwillingness to participate in the chosen intervention, or other extraneous factors, the researcher was prepared to redirect the participant and modify the session as needed.

Observations were conducted immediately after music therapy sessions, and a few hours later in the day. These observations were conducted in the same way as the first week of observation. The data from these observations were collected and compiled separately from the baseline. They were labeled as Clinical Improvisation.

Baseline 2. Baseline 2 was obtained in the same way as baseline 1. On Friday of Week 5, the researcher observed the participant twice for one hour each observation. The researcher recorded any behaviors according to the Off-Task Behavior Chart and Classroom Performance and Behavior chart. The data was compiled for the second baseline (A₂).

Intervention 2. During Weeks 6 through 8, the participant attended lyrical analysis sessions. Three weekly sessions used lyrical analysis to cover the same themes and goals as the first intervention: identifying emotions, following directions, decision making, controlling impulses, identifying emotions and preferences of others, and short term goal-setting. Upon entering the room, the subject was greeted and thanked for coming in. The subject then was given choices from different songs that were discussed in the initial assessment interview. The chosen song was played on the guitar by the researcher once with the instruction that the participant read along in the music. The participant would be encouraged to sing along if he so desired. After the song was played

once, it was repeated while the participant was asked to highlight, underline, or write notes beside any lines that stood out to him. The researcher then helped facilitate lyric analysis by asking carefully constructed questions, replaying parts of the song, asking for the subject's input, and helping the subject to play along to important parts of the song.

Immediately after each session, observations were conducted in the same way as the previous baselines and intervention. The data from these observations were compiled separately and labeled Lyric Analysis.

Data Analysis

The quantitative data from each observation was compiled in an excel spreadsheet and used to compare each intervention to the aggregate baselines, the interventions to each other, and observations immediately after a session to observations later in the day. This data was graphed in order to get a comprehensive look at the differences in behavior in several different scenarios, including: the difference between non-music therapy (baseline) and music therapy days, the difference between improvisation days and lyric analysis days, and the difference between 9 o'clock observations and 11 o'clock observations on improvisation, lyric analysis, and non-music therapy (baseline) days. Qualitative data, such as observations during the session and observations that were not recorded quantitatively, and comments from the participant and the school staff, were used to help the researcher reach more informed conclusions during the compilation of data.

CHAPTER 4

Results

Quantitative Findings

All quantitative findings used data compiled from the Off-Task Behavior Chart and Classroom Performance Chart, both described in chapter 3 (See Appendix C). Raw data from the observation hours (see Table 1), showed that the percentage of on-task behavior time varied widely over the course of the observations. Over time, D's on-task behavior seems to have no discernible pattern, though there are spikes in on-task behavior during observations 4, 6, 12, 14, and 15, which all show 100% on-task behavior.

Table 1: Raw Data observed over the course of 8 weeks in classroom. Each week, the first observation occurred at 9AM and the second observation at 11AM.

Week/Observation	Minutes of On-Task Behavior	Minutes of Off-Task Behavior	Total Time Observed	Percentage of Time On-Task	Classroom Observed
1/1 (baseline)	16	44	60	27%	Math
1/2 (baseline)	40	20	60	67%	English
2/3 (improvisation)	51	9	60	85%	Math
2/4 (improvisation)	15	0	15	100%	English
3/5 (improvisation)	56	4	60	93%	Earth Day
3/6 (improvisation)	50	0	50	100%	English
4/7 (improvisation)	11	49	60	18%	Math
4/8 (improvisation)	57	3	60	95%	English
5/9 (baseline)	0	60	60	0%	Math
5/10 (baseline)	22	38	60	37%	English
6/11 (lyric analysis)	56	4	60	93%	English
6/12 (lyric analysis)	60	0	60	100%	English
7/13 (lyric analysis)	45	15	60	75%	Science/Math
7/14 (lyric analysis)	60	0	60	100%	English
8/15 (lyric analysis)	60	0	60	100%	Setup for Dance
8/16 (lyric analysis)	N/A*	N/A	0	N/A	School Dance

*Note: The end of year dance occurred during the time of the last observation, and as the purpose of observation was to record on-task behavior for school work, this observation did not occur.

When seen as a graph with all observation points plotted (see Figure 1), the trend does not become much clearer. Again, the points at observations 1, 7, 9 and 10 have a lower percentage of on-task behavior, while observations 4, 5, 6, 8, 11, 12, 14, and 15 all

show a higher percentage of on-task behavior. Singling out the weeks where D received no music therapy shows an overall lower level of on-task behavior, and there are a greater number of high-percentage days later in the study, but overall, from this graph there does not appear to be any discernible effect of music therapy on an increase in on-task behavior over time.

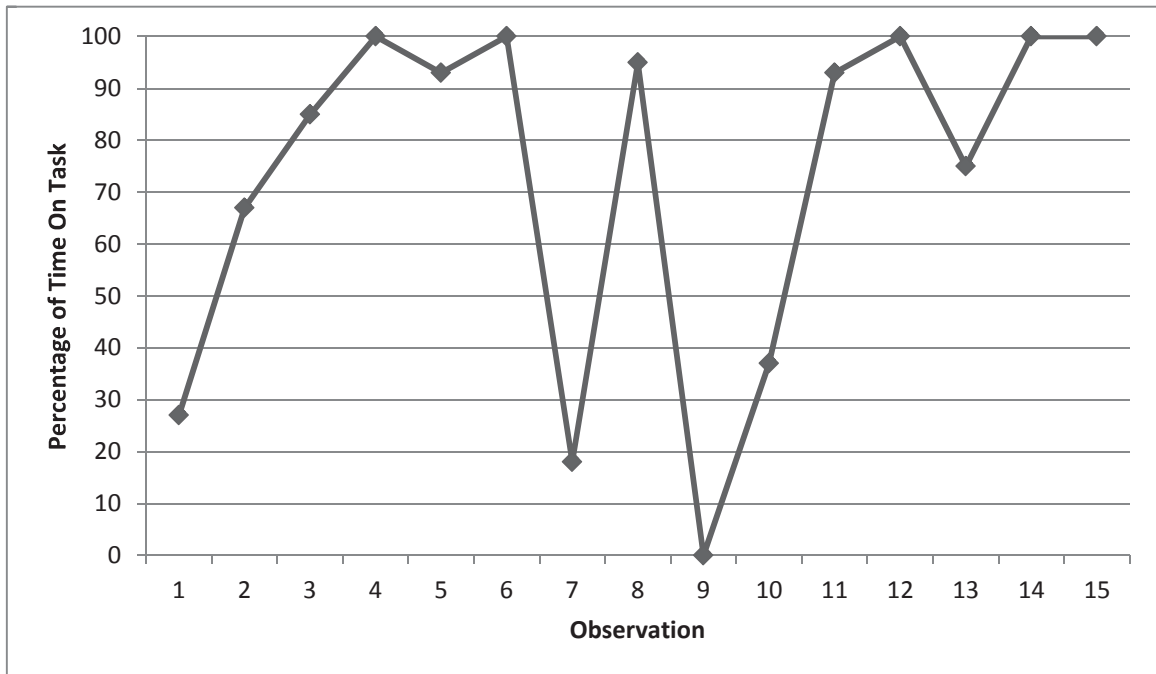


Figure 1. Overall progression of on-task behavior over 8 week period. Note: Observations 1, 2, 9 and 10 were baseline observations. A planned observation 16 did not occur because of an end of year school dance, though the clinical intervention did occur that week.

When accounting for some extraneous factors, such as time of day, and class (See Figure 2), different factors come to light and it is apparent that the classroom D is in effects his on-task behavior, as well as the time of day. Looking at Figure 2, one can see that D was overall more attentive and on-task during the 11AM observations, which shows a higher percentage of time on task every week, without exception. D mostly

attended Math at 9AM and English at 11AM, with exceptions being weeks 3, 6, and 8, when alternate activities were planned in the morning instead of Math class.

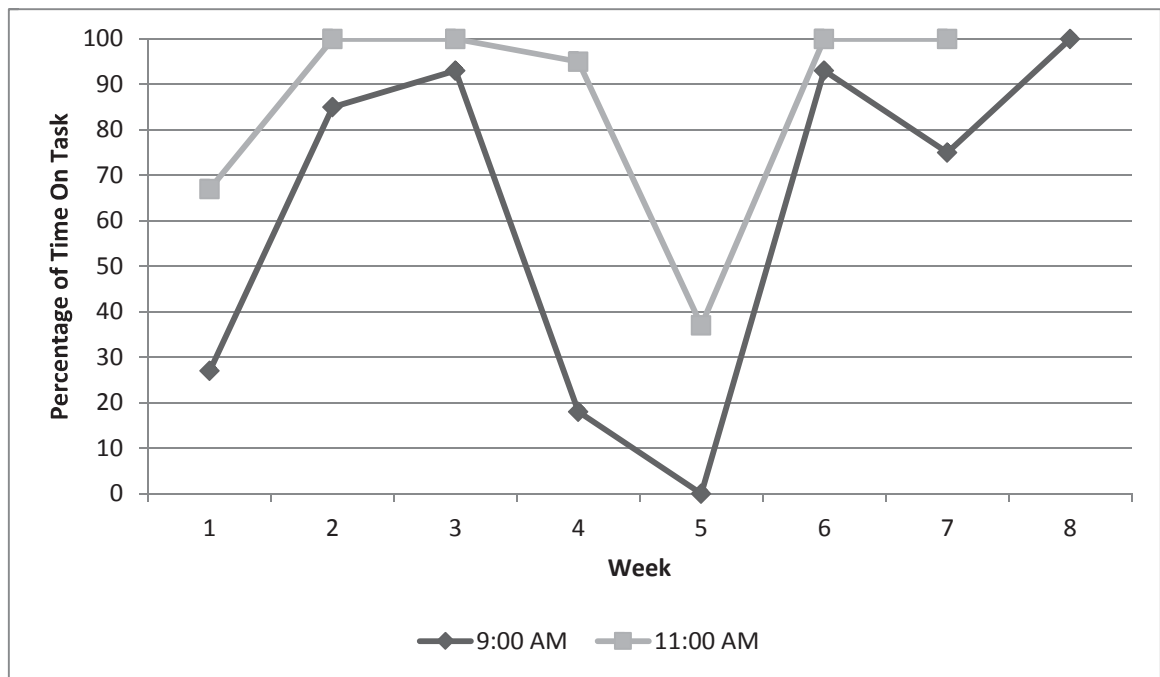


Figure 2. Progression of on-task behavior over 8 week period, split between 9AM observations and 11AM observations. Note: Weeks 1 and 5 were baseline weeks. An 11AM observation did not occur during Week 8 because of an end of the year school dance.

Splitting the data into observations during the control weeks (observations 1,2, 9, and 10), observations during improvisation music therapy weeks (observations 3-8), and observations during lyric analysis music therapy weeks (observations 11-16), shows overall lower percentages of on-task behavior during control weeks. However, no differences are seen between the types of music therapy intervention provided, though there is a very slight increase in on-task behavior during the lyric analysis weeks. (see Figure 3).

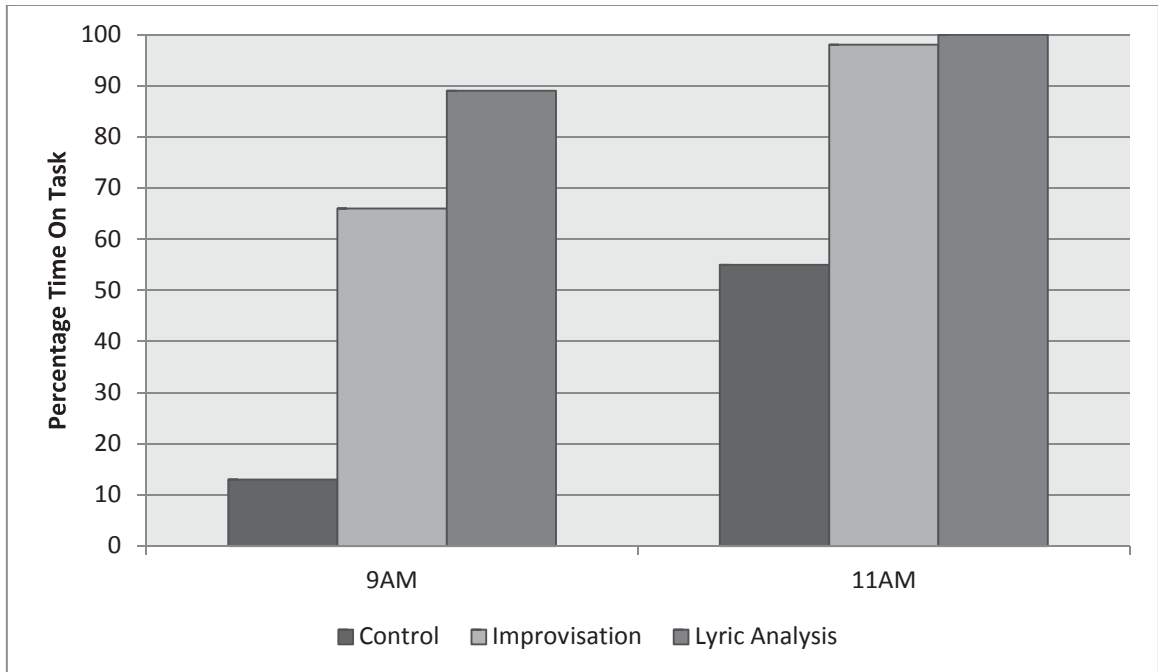


Figure 3. Overall percentage of time on-task during observation weeks (Control), improvisation music therapy weeks, and lyric analysis music therapy weeks, at 9AM and 11AM.

When the classroom performance chart is examined, the same trends can be found as with the Off-Task Behavior Chart. Weeks 1 and 5, the baseline weeks, show dips in performance when compared to the other weeks. The following two figures show the average points received in classroom performance as defined by the sum of points for compliance, adherence, social behavior, and on-task behavior. In each category, D was given 0-3 points every fifteen minutes, which were averaged out for the hour and added up for a 12 point scale. The first figure shows the average points over the course of the study, with the points at Week 1 and Week 5 lower than the other weeks (see Figure 4). The next figure shows a comparison of the average points during the control weeks, the improvisation weeks, and the lyric analysis weeks (see Figure 5).

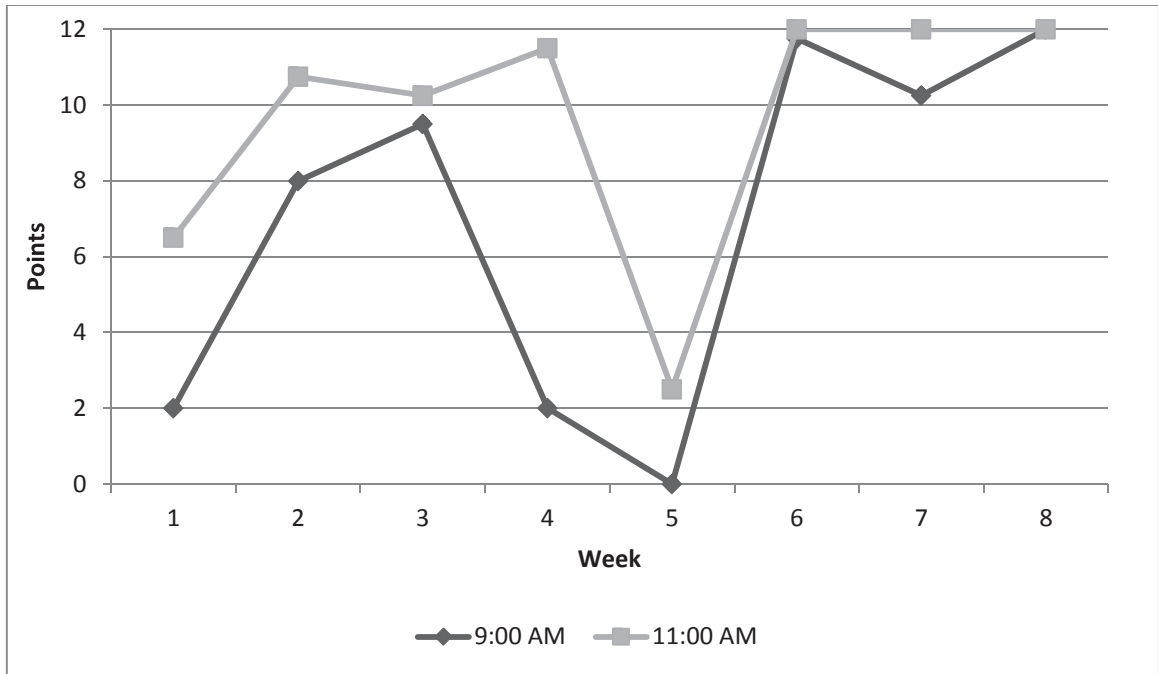


Figure 4. Classroom behavior over time, scored on a 12 point scale, 9AM and 11AM.

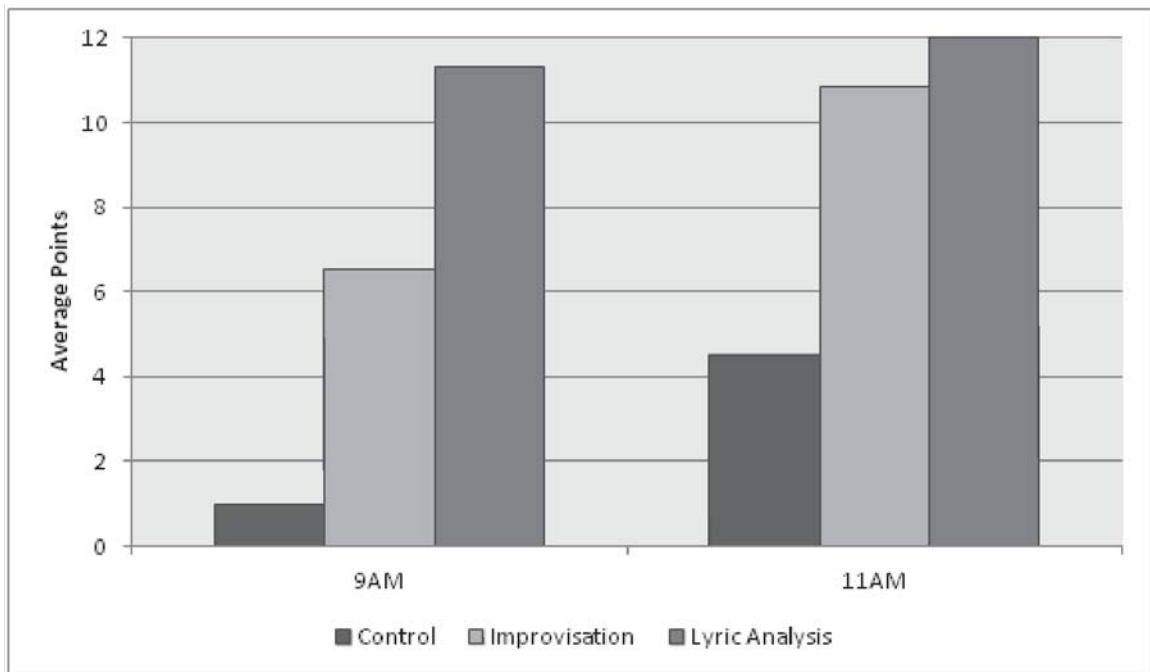


Figure 5. Classroom behavior on a 12 point scale averaged out during control weeks, improvisation weeks, and lyric analysis weeks.

Qualitative Findings

During weeks 2 through 4, when D participated in three improvisational music therapy sessions for 30 minutes each week, D would walk into the music room and wait by the door for instruction. At the beginning and end of each session, D was asked how he was feeling. Before the first session, D said he was feeling “blah,” before the second session he felt “angry”, and before the third session he was “meh.” At the end of each session, he stated that he was doing better and that he liked “starting the day with music.” D chose to play the drums for most of each session. He said that the drums were his favorite instrument and that it made him feel better to hit the drums because “it’s not easy to break it.” During each session, he played five improvisation songs accompanied by the researcher. His first piece was always based on his mood of the day: playing “Blah” with the drums, “Anger” with an electric guitar during the second session, and “Meh” with the drums again during the last session. D wanted to rename “Meh” to “Life” because “it’s so confusing, like life. You never really know what’s going on.”

D enjoyed creating improvised music with his chosen instruments. He particularly enjoyed naming these improvised pieces and adding musical ideas based on the piece he was playing. When asked to play a piece that resembled where he wanted to be, he added a djembe, cowbells, and tone blocks to the drum set, and said that they were coconuts falling in the piece he titled “Hawaii.” He banged on the drums with his fist in a piece he called “Fight” which was about how he got in a fight at his group home. D said that his favorite pieces to play were when the researcher asked him to retell a favorite story of his using musical instruments. He played “Star Wars: The Force Awakens” on drums, using cymbals as “spaceships and laser guns.”

Throughout the sessions, D became more comfortable with the researcher and was more willing to try new things. During the first session, he only wanted to play the drums, and refused to play the djembe other than as a part of the drum set. During the second and third session, D tried other instruments, including the acoustic guitar, keyboard, and electric guitar, and even asked to play the djembe during the third session. For his final improvisation piece, D was told he could play any instrument he wanted to tell a story that was his own, but he had to name the story first. D called his story “The Fat King Slays the Dragon.” He chose to play acoustic guitar, using it as mostly percussion, but playing some notes on the strings as well. At the end of the song, he stated that the fight was difficult and long, and that in the end the king killed the dragon but died from the burns he received. D stated that he felt like he was the king trying to make it through his own life.

During the last three sessions, the researcher introduced song lyrics based on D’s artist preferences. D was given choices between songs at the beginning of each session, and then D was asked to find parts of the song that he related to or that he liked. This lyric analysis intervention took place each session, but generally naturally progressed to different music therapy interventions. Due to the rapport that had been built between the researcher and the participant, the sessions took on a new shape in the final weeks as D expressed interest in trying new things, such as improvising on the songs that had been analyzed, and writing and learning to play his own song.

The first song that was analyzed was Bob Marley’s “Three Little Birds” (1977). D said that he preferred reggae, jazz and old quiet songs because modern rock and pop songs were too loud for him. D said that he liked the line “every little thing is going to be

alright” because although there were not a lot of times when he did not worry, he liked thinking that everything was going to be alright, even if he did not believe it. He said that the only time that he was not worrying was when he was reading, or daydreaming about things like “dreaming about flying and not having gravity.” He then asked to play an improvisational piece based on that thought and related to the themes from the Bob Marley song.

The second song that D chose was “The Sound of Silence” by Simon & Garfunkel (1964). D asked to play the guitar during the song, and sang along, which he had previously refused to do. He said he liked the song because even though it was dark, it was also peaceful. He said that the song could be about death, which reminded him of a song that he had started to write a few years ago. He asked if he could share the song with the researcher and get help writing the rest of it. He wrote the lyrics out on paper and asked the researcher to sing it. D worked with the researcher to shape how he wanted it to sound. This is where the lyric analysis sessions diverged from the original plan to only use lyric analysis as the intervention for the last three sessions. D wanted to focus on writing and recording his song, which was important enough to him that the researcher felt it was clinically and ethically necessary to oblige.

During the third session, D worked with the researcher to complete the song and record the finished lyrics (see Appendix D). D disclosed that he wrote this song after his mom died in a car accident, and the song symbolizes his mom running from death in order to be with him. He stated that “she wasn’t a very good mom, but I never knew my dad, and she was my mom.” He titled the song “Living Nightmare.” D had a final special

request to play his mom's favorite song "My Cherie Amour" by Stevie Wonder (1969). He said he felt like it was a good song to end with, and it made him feel "hopeful."

As the 8 weeks drew to a close, D's teachers indicated that they did not see any difference in D's classroom performance. His teachers stated that they did not feel he had made any progress in all of the time they knew him, which included the last few months. "This is just how he is," one of his teachers said. "I've known him for years, and this is just how he is. He's been a rare failure in this program." Some teachers consented that music therapy over the long term could help him, but that life factors may be playing a role in his behavior lately. "It's been worse for him lately," one of the school staff said. "His life just sucks. There has been a lot of bad stuff happening for him." D reported that on days he had music therapy he felt better throughout the day, and on the day he recorded the song he wrote, he told his teacher "I'm in a really good mood today. Today is the best day of the year."

CHAPTER 5

Discussion

Restatement of Purpose

The purpose of this study was to examine and evaluate the effects of two music therapy interventions on the classroom performance and on-task behaviors of an adolescent with emotional/behavioral disturbances. Two music therapy interventions, thematic clinical improvisation and lyric analysis, were compared to each other and compared with a baseline of no music therapy. Quantitative data and qualitative observations were used to explore whether or not these music therapy interventions are viable options for an adolescent with emotional/behavioral disturbances and which music therapy intervention of the two would be a better option for work with this population. Two baseline weeks were used as a control to compare against the music therapy interventions, which were administered for three weeks each. Notes from music therapy sessions and conversations with the participant and his teachers were used to supplement the data gathered in classroom observations.

Findings

The questions that were addressed in this study were: 1) Does participation in music therapy increase on-task behaviors and classroom performance outside of the music therapy sessions? 2) Which intervention, thematic clinical improvisation or lyric analysis, increases classroom performance and on-task behaviors outside of music therapy sessions? 3) Does the effect of each music therapy intervention continue throughout the day, showing prolonged classroom performance and on-task behaviors?

On Task Behavior. Based on quantitative data, there are indications that D did better in classroom performance and on-task behavior during the weeks he had music therapy. Referring back to figure 4, the control weeks with no music therapy showed a combined percentage of 13% of the time on task at 9 AM and 55% on task at 11 AM. The weeks that music therapy interventions were implemented showed much higher percentages of time on task: 66% of the time on task at 9AM and 98% of the time on task at 11AM during the weeks of thematic clinical improvisation, and 89% of the time on task at 9AM and 100% of the time on task at 11AM during the weeks of lyric analysis. This suggests two conclusions: 1) On task behavior increased later in the day and 2) On task behavior declined on the weeks that D did not receive music therapy. Figure 5, which displays classroom performance levels on a 12-point scale, also shows drops in performance during week 1 (2 points at 9 AM and 6.5 points at 11 AM) and week 5 (0 points at 9 AM and 2.5 points at 11AM), while during the weeks he has music therapy, he averages 9 points at 9 AM and 11.4 points at 11 AM. This also shows a positive correlation between weeks he has music therapy and his classroom performances.

Qualitative findings were mixed, with teachers stating there was no noticeable difference in the way that D was behaving in class but with D showing improved mood, more motivation during music therapy, and better focus earlier in the day, as well as reporting that music therapy made him feel better at school, which he described as usually “sad, slow, and frustrating.”

Clinical Improvisation vs. Lyric Analysis. The comparison of these two music interventions showed no noticeable difference between the two interventions in relation to classroom behavior or on-task behavior. Though lyric analysis showed slightly higher

numbers in both on-task behavior and classroom performance, the differences were too small to be considered evidence of a clear intervention preference, and can also be explained by a number of extraneous variables which will be discussed later in this chapter. D reported that he did not have a preference between what we did the first three weeks and what happened the last three weeks, though modifications in the last three weeks made it difficult to draw comparisons, as lyric analysis was not the only intervention used and was not the focus of the therapy sessions at the end of the study. This also may indicate that naturally the music therapy sessions evolved away from lyric analysis because it was not as effective of a tool in this case, as it was a less preferred option for the participant.

The Effect of Music Therapy Throughout the Day. While the quantitative data shows that D's classroom performance and on task behaviors did increase throughout the day, there is no indication that music therapy was the reason for this. Since his classroom performance and on task behaviors increased even during the weeks he did not have music therapy, it is much more likely that D's mood and behaviors naturally become more positive throughout the day, in part due to his lack of energy at the beginning of the day, and in part due to the classes he attends later in the day. As seen in Figure 3, D performs better in English than he does in Math, even without them being at their regular times. D also states a preference for classes such as English and Science over Math and History. He shows better performance scores when he is doing a hands-on project, and he shows more of a connection to the English and Science teacher, with whom he often sits and talks to during classroom projects. Taking these factors into account, it is difficult to make any solid conclusions about the lasting effect of music therapy.

Other Questions. The question of aggression was not able to be addressed during this study because D did not show enough aggressive or impulsive behaviors for these to be recorded or analyzed. In Crowe's book about music therapy in mental health (Crowe, 2007), she examines the differences and overlap between externalizing and internalizing behaviors. While D did show some externalizing behaviors such as occasionally talking back when someone was trying to get him to work, his externalizing behaviors were much more passive in general, such as sleeping, reading or drawing when he was supposed to be working. D exhibited much more of what Crowe describes when she talks of internalizing behaviors, such as depression, lethargy, apathy, and a fascination with death. These behaviors are related to life satisfaction and are much harder to recognize and treat (McKnight, Huebner, & Suldo, 2002).

Many studies have already been conducted on music therapy with emotional/behavioral disturbances and its effect on the moods of adolescents. This study confirmed findings from those studies through qualitative data. D reported improved mood and had a brighter affect after participating in the music therapy sessions, and his teachers reported that he had talked about music therapy as a positive experience and something he would like to participate in again. As Eidson (1989) found, and as Juslin and Laukka (2003) confirmed, music therapy helps to promote pro-social behaviors and intrapersonal skills. Other studies have confirmed this, as well as adding that music therapy can help with emotion identification (Gold, Voracek, & Wigram, 2004), as evidenced during the thematic clinical improvisation interventions carried out in this study. While D's self-report shows that music therapy helped his mood as he was attending the sessions, it is unclear whether the mood shift had any effect on his overall

school performance, and whether or not there were any lasting effects. While Rickson and Watkins (2003) were able to find lasting effects of music therapy beyond the initial therapy time period, this study was unable to explore this question because of time constraints at the end of the school year.

Reflections Upon the Research

Limitations. Several limitations presented themselves as this study progressed. The short amount of time due to the approaching end of the school year created limitations on research beyond the end of the therapy sessions. The small size of the school created a small pool of students from which to select a study participant, and the very nature of students with emotional and behavioral disturbances makes it hard to speak to and obtain permission from parents because there often are not any, or if there are, they are not often available or may be hesitant or unable to give permission for participation in a study. The n of 1 for this study was necessary to observe the effects of one on one therapy with an individual, but in the future, it would be more enlightening to conduct a study with a larger group of people for a longer amount of time.

Extraneous Variables. When compiling the data, several extraneous variables stood out as affecting the study. One of these variables was D's own situation. D suffered from comorbid health factors that were not initially disclosed to this researcher. These may have made him tired in the morning, and he slept several times in class. While this was a behavior that was focused on in the study, there may have also been biological factors at play. These factors also may have played a role in D missing school, as he did before the initial observation. A combination of sick days for the participant, the school's scheduled Spring Break, and a sick day for the researcher created a 2 week gap between

weeks 2 and 3, and a gap of 1 week each between weeks 4 and 5 as well as weeks 6 and 7. The unexpected disruption of study continuity stood out as a possible extraneous variable for study results.

As is evident by the Figures in Chapter 4, D was consistently more engaged later in the day than he was at 9 AM. This was the case whether or not he received music therapy that day. D also had class preferences which affected how he performed in class, as discussed earlier in this chapter. Perhaps most significant, D received bad news before his session on week 4, as he was waiting to see if he would be accepted into a foster home and was rejected the night before he came to school. This emotional experience can be seen in the data, where in Table 1 and Figures 1, 2 and 5, there is an out of place drop in performance during week 4 at the beginning of the day (observation 7). D did seem to rebound, however, as observation 8 (the 11 AM hour) was consistent with the rest of the data.

When the study started, the school and researcher agreed to weekly observations and sessions on Fridays. After reflection, this proved to be a difficult day to conduct consistent research, because Fridays had a more varied schedule than the rest of the week. Many Fridays were half days, resulting in the need to observe at 9AM and 11AM, when the initial plan was a much later second observation at the end of the day. Some Fridays saw a different class schedule, such as week 3, during which there was a celebration of Earth Day in the morning with hands-on activities, resulting in a spike of on-task time at the 9AM slot, and week 8, which was devoted to setting up for the end of year school dance. Some weeks there were movies or recess during the observation times, and observations were concluded early and the observation period shortened (see

Observations 4 and 6 on Table 1). In addition, Friday is the last day before the weekend, and this naturally created a different atmosphere in the classroom and for the participant than the rest of the week would. In the future, multiple days of the week should be considered for both music therapy sessions and observations.

The end of the school year may have had a similar effect as the end of the week. In the last weeks of the study, there was a different atmosphere in the classroom, and all students, including D, displayed an excitement for the summer, which, combined with more exciting and less demanding school work, likely increased classroom performance and on-task behaviors at the end of the study.

Other variables that may have had an effect on the slight difference in performance between the two different music therapy interventions were that rapport improved over time and that the final sessions' focus naturally diverged away from lyric analysis. It was evident that D became more comfortable over time with music therapy and with the researcher. The rapport built between the two showed in D's willingness to try new things as time progressed, his drive to be more creative, and his readiness to divulge and explore more personal information and deeper emotions towards the end of the study. Because of this, the lyric analysis sessions became more meaningful for D, but this is likely only because they came after several weeks of getting to know the researcher and become comfortable with music therapy. Also, because of the implications of working clinically with an adolescent with emotional/behavioral disturbances, it was ethically necessary for the researcher to change the final two sessions at the expense of the study. Priority was given to the well-being of the participant, and adapting the

sessions to benefit the mental health of D may have changed the final comparison between the two music therapy interventions.

Clinical Implications

This study confirms prior studies that music therapy can improve mood in adolescents with emotional/behavioral disturbances and also addresses the effect of music therapy on classroom performance. Suggestions for clinicians include that patients in this demographic be given ample room for creativity and exploring in a vein that the adolescent is comfortable with, and then take small steps outside of that comfort zone. Though this study did not intend to so deeply explore the emotions involved in songwriting, in this case songwriting was a great tool which helped to open up some emotions about past traumas and allowed the participant to express himself in a positive way.

The unexpected direction of the end of this project shows that expectations must be subject to change when working with this population. Results and emotions may be brought forward that were not intended or expected, and the clinician must be able to shape the progression of the sessions to fit the student. Though in this case, this deviation from the plan showed positive results in behavior and mood, the opposite could initially hold true if emotions and traumas are revealed that the student is resistant to exploring. Teaching the student to bring the positive interaction from the music therapy into the classroom as well will go a long way to improve performance inside the classroom.

This is also why rapport is so important. In this study, rapport was a key part of D's music therapy experience, but it also created an extraneous variable when trying to provide results about which intervention was more preferable. Though not helpful for

purposes of the research questions, this study showed that building rapport is an important part of music therapy when working toward any goal with this population.

Suggestions for Further Research

Though this study did not evaluate for statistical significance, due to the short nature of the study and because it only had one participant, it warrants more research into music therapy on school performance. Research with a larger sample of participants could indicate the need for more music therapy in schools, particularly for students who have trouble concentrating in class and students who are at-risk. D already had a traumatic childhood which included the death of a parent, unstable life in a group home, and rejection from several foster homes. He is only one of many children and adolescents across the US, and the world, who need help succeeding in life and could find that help through music therapy. Further research into music therapy with this population could provide the necessary backing to fund more music therapists in schools, particularly in schools specializing in at-risk children, like the school where this study was conducted.

Future research should attempt to increase the relevancy of this study by finding more students to participate in music therapy, making the music therapy more frequent or with longer contact time, and increasing the duration of the study to half the school year or even the full school year. These modifications could make the study broader in scope and would provide important information about the population as a whole. Increasing the sample size could create the possibility for discussion about a model for music therapy for the population of adolescents with emotional and behavioral disturbances as a whole. Increasing contact time, either by making music therapy sessions more frequent or longer than a half hour, could increase the efficacy of the therapeutic interventions and create

more time for creating rapport and a more dynamic, therapeutic environment. Elongating the study's time frame to one year could help to correct for extraneous variables that may be present at specific times of the year and would give the researcher the opportunity to obtain more diverse data. The extraneous variable of the researcher having better rapport with the participant in the later interventions might be solved by implementing the different interventions on alternate weeks, or in groups of alternate weeks (i.e. 3 weeks of improvisation, 3 weeks of lyric analysis, and then repeating those weeks again). If this strategy were to be used in a longer study, then both interventions would be seen when there was little rapport built up as well as when the researcher and participant were more comfortable with each other.

Another suggestion for future research would be to use multiple researchers. If one researcher was consistently focused on providing music therapy, while the other was focused on observation, not only would the research be less likely to be obscured by bias, but new observations may be discovered that would not be seen by a researcher both conducting music therapy and observing at the same time.

A recommendation for future research is to communicate with the school staff as much as possible. With this study, many of the avoidable extraneous variables were because some of the teachers were unaware of the timetables of the study or the researcher was unaware of the changes in class schedules. While there are always situations that arise in a non-controlled environment that are, by definition, beyond the control of the researcher, more communication and involvement with the entire school staff will ensure that misunderstandings will be kept to a minimum and schedule changes will be known ahead of time.

While the limitations and small sample size reduced the amount of data available for this study and therefore it cannot in itself be broadly applied to the population of adolescents with emotional and behavioral disturbances, this study still highlights the need for more evidence-based music therapy in schools and is a starting point for further research with this population. Though D showed minimal improvement in the short time of the study, he reported improvement in mood on the days that he received music therapy, and there were some indications that on the days he received music therapy and was in a better mood, he was more on task in class. In addition to verbally indicating that he enjoyed music therapy and felt happier on days he participated in music therapy, D displayed an ability to respond to music therapy by creating his own song at the end of the sessions, which is a tangible reminder for him in the future. Due to his responses to music therapy and his positive reactions and comments throughout the study, it is assumed that further research which involved more participants and increased clinical contact would support the conclusion that music therapy can improve mood and classroom performance in adolescents with emotional/behavioral disturbances.

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APPENDIX A
CONSENT FORM

Parent/Guardian Consent Form for Participants Under 18 Years of Age or Dependent Adults

Please read below with care. You can ask questions at any time, now or later. You can talk to other people before you fill in this form.

Study's Title: The Effect of Thematic Improvisation and Lyric Analysis on Classroom Performance in an Adolescent with a Behavioral/Emotional Disorder

Why is this study being done? This study compares two music therapy tasks: improvisation and lyric analysis. I want to see their effect on students who have trouble in school because of emotional and behavioral problems. My goal is to see if music therapy can change how well students do in their classes and how they get along with others. The music therapy tasks will also be compared with no music therapy at all. This will help to see whether or not these music therapy tasks are good options for a student with emotional or behavioral problems. I will also look at which music therapy task is better. I will observe behavior in the student during two hours in a regular classroom throughout the day after music therapy has taken place. Each task will be done with the student by the person who wrote this study.

What will happen while your child or dependant is in the study? Your child or dependant will be asked to take part in an 8-week-long study. During the first week, the researcher will visit the student's classroom twice on one day during the school week. No music therapy will take place during this week. The researcher will observe the student for an hour on each visit.

During weeks 2-4 of the study, your child or dependant will take part in music therapy in the form of improvisation for 30 minutes once a week. Improvisation is playing musical instruments in any way you wish to make music. This music may relate to how the person is feeling. A person does not have to know anything about music to do improvisation. Improvisation will be done with the following goals in mind: identifying emotions in self and others, following directions, decision making, thinking before acting, understanding decisions, and setting short term goals. For these sessions, your child or dependant will be pulled out of class for 30 minutes. This will happen once a week for six weeks of the study. The researcher will then observe your child or dependant in the classroom for two hours. One hour will take place after each session and the other at the end of the same day. Your child or dependant will not need to interact with the researcher during observations. They will not take him or her away from school work.

The 5th week of the study will be a repeat of the first week. No music therapy will take place during this week. The person running the study will visit your child or dependant's classroom twice in one day for an hour each visit.

During weeks 6-8 of the study, your child or dependant will be asked to take part in lyric analysis of popular songs that he or she will help choose. The researcher will play these songs either on guitar, piano, or an mp3 player. Your child or dependant will be asked questions about the songs and what they think about the lyrics. He or she will also take part in musical activities that relate to the songs. The same goals will be used as before: identifying emotions in self and others, following directions, decision making, thinking before acting, understanding decisions, and setting short term goals. The researcher will again observe your child or dependant in the classroom for two hours. One hour will take place after each session and the other at the end of the same day.

Time: This study will take about eight weeks. For two of the weeks, the researcher will visit the classroom of your child or dependent. This won't require any action from your child or dependent. The researcher will only

observe your child or dependent in their normal classroom environment. Your child or dependant will also be asked to take part in a half hour of music therapy per week for six weeks.

Risks: The risks in this study are no greater than those in regular life. The risks involved include any emotions that your child or dependant may feel in a therapy situation. This may mean that challenging feelings and emotions might emerge as a natural part of the process. He or she may also experience loss of privacy that could be felt from observation in the classroom. Your child or dependant will miss 30 minutes of class, once per week for six weeks. This may mean that he or she will need to make up some class work. With only one participant in this study, there is a small risk of people who read the study linking information from the study to your child or dependant if they are aware that he or she was in the study.

Benefits: Your child or dependant may benefit from this study. Music therapy is designed to increase self-awareness, positive thinking and behaviors, and respect for self and others. These are benefits that your child or dependent could receive from music therapy. Music therapy costs money, but your child or dependent would be getting music therapy for free from a qualified music therapist. The public in general may also benefit from any findings that result from this study. The researcher hopes that information gathered in this study will help him learn more about music therapy with adolescents.

Compensation: The participant will not be paid as a result of participating in this study.

Who will know that your child or dependant is in this study? Your name and your child or dependant's name will not be associated with the published study. A false name will be used for the purposes of the information in the study. All identifying information will be changed. The researcher will not share any identifying information about you or your child or dependant unless required to do so by law, or unless you have given written permission.

The information gathered during the music therapy interventions and classroom observations will be used by Brandon Madsen, MT-BC. It will be presented to Dr. Brian Abrams, Ph.D., MT-BC (thesis advisor) and any research committee members and officials at Montclair State University in Montclair, NJ. Permission given on this date to use and disclose this information remains in effect always. By signing this form you give permission for the use and disclosure of the information found during this study. Again, this information will in no way be connected to you or your child or dependant. You should also know that laws in place require that any person having reasonable cause to believe that a child has been abused to report it to the Division of Youth and Family Services.

Does your child or dependant have to be in the study? Your child or dependant does not have to be in this study. He is a volunteer! It is okay if he wants to stop at any time and not be in the study. He does not have to answer any questions that he does not want to answer. Nothing will happen to your child or dependant. You are not required to sign this Consent and Authorization form and you may refuse to do so without affecting any services you or your child/dependant are receiving or may receive from the John Morse Elementary School or the Sacramento Unified School District. However, if you refuse to sign, you cannot participate in this study.

Do you have any questions about this study? Phone or email Brandon Madsen, MT-BC, at 971-645-1022 or bkmadsen23@yahoo.com, or Dr. Brian Abrams, my Faculty Sponsor, at Montclair State University, 973-655-3458 or abramsb@mail.montclair.edu

Do you have any questions about your rights as a research participant? Phone or email the IRB Chair, Dr. Katrina Bulkley, at 973-655-5189 or reviewboard@mail.montclair.edu.

Statement of Consent

I have read this form and decided that I agree to my child's participation in the project described above. Its general purposes, the particulars of involvement, and possible risks and inconveniences have been explained to my satisfaction. I understand that my child can withdraw at any time. My signature also indicates that I have received a copy of this consent form.

If you choose to have your child or dependant in this study, please fill in the lines below.

Child's Name: _____

_____ Name of Parent/Guardian	_____ Signature	_____ Date
_____ Name of Parent/Guardian	_____ Signature	_____ Date
_____ Name of Principal Investigator	_____ Signature	_____ Date
_____ Name of Faculty Sponsor	_____ Signature	_____ Date

APPENDIX B
ASSENT FORM

ASSENT FORM

Please read below with care. You can ask questions at any time, now or later. You can talk to other people before you fill in this form.

Study's Title: The Effect of Thematic Improvisation and Lyric Analysis on Classroom Performance in an Adolescent with a Behavioral/Emotional Disorder

Who am I? I am Brandon Madsen. I go to school at Montclair State University in New Jersey in the Music Therapy Department. I am in California working as a music therapist while I finish school.

Why is this study being done? I want to find out more about music therapy. Music therapy is a way of using music to help people. Some kids have emotional and behavioral problems that make learning in hard for them. I want to know what kind of music therapy can help make it easier for them to learn. I am asking you to be a part of this study because I believe you can help me learn more about music therapy. What I learn may help kids like you do better in school.

What will happen while you are in the study? If you choose to be in this study, you will be asked to be in 6 music therapy sessions. This will be during school hours, so you will miss some class. We will play some instruments together in the first three sessions and look at the lyrics of some popular music for the last three sessions. Don't worry; you don't have to know how to play music to be in these sessions. I will also visit your classroom for 2 hours each day that we have a session, as well as for two hours the week before the sessions, and two hours the week between each kind of music therapy.

Time: This whole study will take about 8 weeks. The first week I will visit your classroom for two hours of a day. You do not have to do anything different from your normal classroom activities when I visit. The next three weeks, I will see you for a half hour outside of class and we will play instruments together. The week after that, I will visit you in your classroom again for two hours of one day. The next three weeks, I will see you for a half hour outside of class. We will look at song lyrics together and listen to the songs.

Risks: You may feel uncomfortable with sharing things when you meet with me. You also may feel uncomfortable with me visiting your classroom. You also will miss some class, and may need to make up class work. The risks in agreeing to do this study are not greater than those in ordinary life.

Benefits: You may be helped by the music therapy. You may feel happier and be able to concentrate better. Also, other music therapists may learn something that will help all children and adolescents who have emotional and behavioral trouble some day.

Who will know that you might be in this study? You and your parent(s) will know that you are in this study. I will know that you are here, and your teacher and principal will know that we are here, but we won't tell anyone else, but other students may know that you are leaving class.

Do you have to be in the study? You do not have to be in this study. We won't get mad with you if you say no. It is okay if you change your mind at any time and leave the study. You do not have to answer any questions you do not want to answer. Nothing will happen to you.

Do you have any questions about this study? Phone or email Brandon Madsen, MT-BC, at 971-645-1022 or bkmadsen23@yahoo.com, or Dr. Brian Abrams, my Faculty Sponsor, at Montclair State University, 973-655-3458 or abramsb@mail.montclair.edu

Do you have any questions about your rights as a research participant? Phone or email the IRB Chair, Dr. Katrina Bulkley, at 973-655-5189 or reviewboard@mail.montclair.edu.

_____ Name of Research Participant	_____ Signature	_____ Date
_____ Name of Witness	_____ Signature	_____ Date
_____ Name of Principal Investigator	_____ Signature	_____ Date
_____ Name of Faculty Sponsor	_____ Signature	_____ Date

APPENDIX C
DATA GATHERING SHEET

Off-Task Behavior Charting

Date _____ Class _____ Week _____ Observation _____ Time _____

(one minute intervals)

+ (on task) - (off task) V (vocal behavior) M (physical behavior)

P (passive off-task behavior) A (aggression) D (not following directions) T (talking back)

Time	Bx	Time	Bx	Time	Bx	Time	Bx
:01		:16		:31		:46	
:02		:17		:32		:47	
:03		:18		:33		:48	
:04		:19		:34		:49	
:05		:20		:35		:50	
:06		:21		:36		:51	
:07		:22		:37		:52	
:08		:23		:38		:53	
:09		:24		:39		:54	
:10		:25		:40		:55	
:11		:26		:41		:56	
:12		:27		:42		:57	
:13		:28		:43		:58	
:14		:29		:44		:59	
:15		:30		:45		:60	

Classroom Performance and Behavior Chart

3- Great effort. On task and tasks completed almost all the time. Positive participation without regular redirection.

2- Good effort. On task most of the time, most tasks completed. Positive participation with only some redirection.

1- Some effort/participation. Completes some tasks. Regular prompts or redirection necessary.

0- Serious lack of effort and/or participation. Difficult time meeting expectations.

	Compliance	Adherence	Social Behavior	On Task Behavior
0-15 minutes				
15-30 minutes				
30-45 minutes				
45-60 minutes				

Notes:

APPENDIX D

PARTICIPANT COMPOSITION

Living Nightmare
Lyrics by D

VERSE 1

Am
I went down that path
D
I did not turn back
Am E7
A strange shadow, bones in tattered robes

VERSE 2

Am
I'm running from death
D
There is no end
Am E7
The reaper is creeping closer to me

CHORUS

Am
Save me from my destiny
D
Save me from my past
Am D
Save me from the demons of my future
Am
Save me from my destiny
D
Save me from my past
Am D
Save me from the demons of my future

(REPEAT VERSE 1)

(REPEAT VERSE 2)

(REPEAT CHORUS)

BRIDGE

Em Am
Reaper's swinging his scythe
Em Am
Running for my life
Em Am E7
There is no escape

(REPEAT CHORUS)

(REPEAT VERSE 1)

APPENDIX E

SONG LYRICS FOR ANALYSIS

Three Little Birds
Bob Marley

CHORUS

A
Don't worry about a thing
D A
'Cause every little thing is gonna be alright
A
Singin' don't worry about a thing
D A
'Cause every little thing is gonna be alright

VERSE

A
Rise up this mornin'
E
Smile with the risin' sun
F#m D
Three little birds perch by my doorstep
A E
Singin' sweet songs of melodies pure and true
D A
Sayin', this is my message to you

(REPEAT CHORUS)

(REPEAT VERSE)

(REPEAT CHORUS x2)

The Sound of Silence

Simon & Garfunkel

Am G
Hello darkness my old friend
Am
I've come to talk with you again
F C
Because a vision softly creeping
F C
Left its seeds while I was sleeping
F C
And the vision that was planted in my brain
Am G Am
Still remains within the sound of silence

Am G
In restless dreams I walked alone
Am
On narrow streets of cobblestone
F C
'Neath the halo of a streetlamp
F C
I turned my collar to the cold and damp
F
When my eyes were stabbed
C
By the flash of a neon light
Am
That split the night
G Am
And touched the sound of silence

Am G
And in the naked light I saw
Am
Ten thousand people, maybe more
F C
People talking without speaking
F C
People hearing without listening
F C
People writing songs that voices never share
Am G Am
And no one dare disturb the sound of silence

Am G
"Fools," said I, "You do not know,
Am
Silence like a cancer grows.
F C
Hear my words that I might teach you
F C
Take my arms that I might reach you."
F C
But my words, like silent raindrops fell
Am G Am
And echoed in the wells of silence

Am G
And the people bowed and prayed
Am
To the Neon God they'd made
F C
And the sign flashed out its warning
F C
In the words that it was forming
And the sign said,
F
"The words of the prophets
C
Are written on the subway walls
Am
And tenement halls
G Am
And whispered in the sounds of silence."

My Cherie Amour
Stevie Wonder

Cmaj7 Fma7
La la la la la la
Gmaj7
La la la la la la (repeat)

D7 Gmaj7 C7sus C7 Fmaj7 D7
My Cherie Amour, lovely as a summer's day
Gmaj7 C7sus C7 Fmaj7 D7
My Cherie Amour, distant as the Milky Way
Cmaj7 Dsus Bm7
My Cherie Amour, pretty little one that I adore
E9 A9
You're the only girl my heart beats for
Dsus Gmaj7
How I wish that you were mine

D7 Gmaj7 C7sus C7 Fmaj7 D7
In a café, or sometimes on a crowded street
Gma7 C7sus C7 Fmaj7 D7
I've been near you, but you never notice me
Cmaj7 Dsus Bm7
My Cherie Amour, won't you tell me, how could you ignore
E9 A9
That behind that little smile I wore
Dsus Gmaj7
How I wish that you were mine

D7 Gmaj7 C7sus C7 Fmaj7 D7
Maybe someday you'll see my face among the crowd
Gmaj7 C7sus C7 Fmaj7 D7
Maybe someday I'll share your little distant cloud
Cmaj7 Dsus Bm7
Oh Cherie Amour, pretty little one that I adore
E9 A9
You're the only girl my heart beats for
Dsus Gmaj7
How I wish that you were mine

Cmaj7 Fma7
La la la la la la
Gmaj7
La la la la la la (repeat)